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## **Amphipods of Switzerland**

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## Amphipods of Switzerland

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### ABSTRACT

We present the first conclusive overview on amphipods of Switzerland, with distribution maps of all 43 species recorded so far.

### KEY WORDS

Amphipoda; Switzerland; Diversity; Alps; Distribution maps.

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Switzerland represents a biogeographically interesting region. The Swiss Alps are the origin of four major drainage areas in Central Europe. Hence knowledge of the flora and fauna of this region are of high interest. Amphipods as keystone species are no exception in this. But although the ecological importance and widespread distribution of amphipods is recognized, the actual diversity and distribution is still poorly studied in many areas, particularly in Switzerland. For example, up to now there exists no detailed overview of all amphipod species from Switzerland, no identification key covering all present drainage areas and especially very little information on amphipods in alpine and higher elevation habitats.

Over the last few years we collated an extensive database on amphipods of Switzerland. It covers more than 1,800 sites and more than 175,000 identified amphipod specimens. The data originate from various sources, such as the governmental biodiversity monitoring program, official reports, published literature and our own extensive sam-

pling during the years 2012 until now. All available data from collections in Switzerland were included. We present the results as distribution maps of all present species of Switzerland. Additionally we updated the checklist of Swiss amphipods from Altermatt et al. (2014). Over the last 150 years, 43 species were recorded in Switzerland. 21 of these were subterranean species (*Niphargus* sp. and *Crangonyx subterraneus* Spence Bate, 1859), and another 13 species should be considered non-native to Switzerland. A monograph on Swiss amphipods is in preparation and will be published soon (Altermatt et al., in prep.). The data will help to understand the ecology of Swiss amphipods, the influence of connectivity on amphipod distribution and diversity and the early detection of non-native species.

### REFERENCES

Altermatt F., Alther R., Fišer C., Jokela J., Konec M., Küry D., Mächler E., Stucki P. & Westram A.M.,

2014. Diversity and distribution of freshwater amphipod species in Switzerland (Crustacea: Amphipoda). PLoS one, 9, e110328.8.

Altermatt F., Alther R., Fišer C. & Švara V., in prep. Fauna Helvetica: AMPHIPODA-Die Flohkrebse der Schweiz. CSCF. Neuchatel, Switzerland.